## Charter

## NASA

**George C. Marshall Space Flight Center** Marshall Space Flight Center, Alabama 35812 National Aeronautics and Space Administration

| Shuttle Propulsion Office |                                    | Charter Number: |
|---------------------------|------------------------------------|-----------------|
|                           | MPR 1100.1                         | MP01            |
|                           | Effective Date: September 23, 2008 |                 |

**Subject:** Shuttle Propulsion Office

## MISSION STATEMENT

The Shuttle Propulsion Office (SPO/MP01) is responsible for executing the Space Shuttle Program (SSP) role assigned to Marshall Space Flight Center (MSFC). These responsibilities include activities associated with the Space Shuttle Main Engine (SSME) Project, External Tank (ET) Project, and Reusable Solid Rocket Booster (RSRB) Project. The SPO is responsible for these propulsion hardware elements and associated systems, test and flight operations, and facilities. The Propulsion Systems Engineering and Integration (PSE&I) Project Office is responsible for SPO integrated systems engineering. The SPO Transition Project Office (TPO) is responsible for the overall planning, coordination, and execution of SPO and MSFC Space Shuttle Transition and Retirement (T&R) activities. The SPO Resident Management Office (RMO) at Kennedy Space Center (KSC) provides launch operations and other on-site support to the SPO. The SPO manages the performance of civil service and industry personnel and resources in the planning, design, engineering, integration, development, production, testing, upgrade, delivery, and operation of the MSFC propulsion elements, ensuring that safety, schedule, performance, and cost goals are met.

## RESPONSIBILITIES

- 1. The SPO Manager is also the Deputy Program Manager for Propulsion and is functionally responsible to the Manager, SSP, Johnson Space Center (JSC), for the integration of SSP activities assigned to MSFC, including those related to the SSME, ET, and RSRB. (Ref: NSTS 07700, Volume 1, Program Description and Requirements Baseline). The SPO Manager reports administratively to the Director, MSFC, and is responsible for providing the Director with the technical and programmatic status of the SPO. These responsibilities also include ensuring that safety, schedule, performance, and cost goals are met. The SPO Manager is supported by the SPO Program Planning and Control Office, which functions as an MP01 staff office.
- 2. The project managers within the SPO for SSME, ET, and RSRB report functionally and administratively to the SPO Manager. Responsibilities include: design, development, manufacturing, testing, launch processing support, flight performance, anomaly resolution, and refurbishment/overhaul of their respective propulsion elements, and delivery of flight hardware in support of the Space Shuttle flight schedule. This responsibility includes ensuring all safety goals are met; managing technical and programmatic requirements, budgets, and schedules; managing resident offices, facilities, personnel, and other resources required to meet hardware development and production delivery requirements; negotiating task agreements; assisting administration of prime contracts and resolving associated contractor requirements, performance, and technical issues; ensuring MSFC and SSP management are

- informed of project status and pertinent issues, and recommending courses of action required by technical, schedule, or other contingencies; participating in mission Flight Readiness Reviews and executing Certification of Flight Readiness (CoFR) and Mission Management Team (MMT) responsibilities; participating as a member of the SSP Program Requirements Control Board; serving as Chairperson, Project Configuration Control Board; and, supporting T&R activities.
- 3. The PSE&I Project Office is responsible for SPO integrated systems engineering. The Manager, PSE&I, reports to the Manager, SPO. Responsibilities include reviewing and resolving systems integration issues among SSME, ET, RSRB, and other Space Shuttle Program elements and reporting on these issues to the JSC Systems Integration Office. The Manager reviews flight readiness status and signs the Space Shuttle Systems Engineering and Integration Office (SEIO) CoFR indicating flight readiness of the systems integration area and supports the SSP MMT. Other responsibilities include management of Shuttle Engineering Support Center activities; Main Propulsion System requirements review and issue resolution; the Shuttle Environmental Assurance Initiative; and supporting T&R activities.
- 4. The TPO is responsible for identifying and dispositioning all requirements and issues associated with Shuttle T&R as they affect MSFC, including real and personal property, capabilities, hardware, data, and associated workforce. This includes allocation, definition, management, and verification of MSFC transition requirements. The TPO provides management oversight of T&R activities and ensures that requirements are defined, analyzed, controlled, maintained, and properly communicated to participating organizations.
- 5. The SPO RMO is MSFC's technical representation for SSME, ET, RSRB, PSE&I, and Safety and Mission Assurance at KSC. The RMO Manager reports directly to the SPO Manager. RMO representatives for each Shuttle propulsion element assist in resolving issues during launch processing and participate in program and project milestone reviews. The RMO also generates and provides reports which track hardware and related issues. RMO personnel play a key role during tests, simulations, and launches, and monitor data from the KSC Marshall Engineering Support Area. In addition to the MSFC propulsion element staff, Launch Support Services representatives from the propulsion prime contractors support the RMO team.

David A. King Director